

**LIPID METABOLISM IMPROVING AGENT FOR ANIMAL****Publication number:** JP2001169731 (A)**Publication date:** 2001-06-26**Inventor(s):** ITO SHINOBU; OGATA EIJI**Applicant(s):** SHOWA DENKO KK**Classification:****- international:** **A23K1/18; A23K1/16; A61K31/661; A61P3/06; A23K1/18; A23K1/16; A61K31/661; A61P3/00;** (IPC1-7): A23K1/16; A61K31/661; A61P3/06; A61K31/661**- European:****Application number:** JP19990359735 19991217**Priority number(s):** JP19990359735 19991217**Abstract of JP 2001169731 (A)**

**PROBLEM TO BE SOLVED:** To obtain a lipid metabolism improving agent that promotes an unsaturated fatty acid-synthesizing metabolism, increases the ratio of unsaturated fatty acids in fatty acid compositions and improves animal health and meat quality of animals by administering an activity sustaining type stabilized antioxidant provitamin derivative together with fatty acids. **SOLUTION:** This lipid metabolism improving agent for animal bodies characteristically includes L-ascorbic phosphates and/or  $\alpha$ -tocopherol phosphate. A lipid metabolism improving composition obtained by formulating the improving agent to fatty acids is prepared and a method for increasing the health and improving meat quality of animal bodies by using a feed formulated with the composition is provided.

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Title: Lipid Metabolism Improving Agent for Animal

Claims:

1. A lipid metabolism improving agent including L-ascorbic phosphates and/or alpha-tocopherol phosphates.

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Detailed Description of the Invention

[0001]

The present invention relates to a lipid metabolism improving agent including L-ascorbic phosphates and/or alpha-tocopherol phosphates having various physiological activities, a lipid metabolism improving composition for livestock feed obtained by using the improving agent and fatty acids, and a method for increasing the health and improving meat quality of animal bodies.

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[0006]

However, unsaturated fatty acids have a tendency to be easily oxidized at its double bond portion to produce oxidates such as various peroxides and oxides. These oxidates are known to show a toxicity against animals. Therefore, when livestock feed containing unsaturated fatty acid(s) is used for farm animal, cultured fish and poultry, use of the feed having a low level of oxidation or a high level of oxidative stability is necessary. Accordingly, when a raw material containing unsaturated fatty acid(s) is(are) added into the feed and then it is administered to animals, measures how the unsaturated fatty acid(s) is prevented from oxidation is an important problem. Therefore, use of additional antioxidant vitamins such as tocopherol (vitamin E) and the like, encapsulation, formation of inclusion

compound and the like are employed. However, a normal antioxidant(s) is(are) unstable itself(themselves). Accordingly, for the easily oxidized fats and oils such as highly unsaturated fatty acid(s), sufficient anti-oxidation effect cannot be obtained, and therefore, sufficient improving effect on meat quality could not have been attained by livestock feed containing unsaturated fatty acid.

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